REMARKS

Claim 11 has been amended to incorporate the subject matter of claims 12 and 14, which have been canceled, without prejudice. Claim 15 has been amended to depend on claim 11.

New Claim 16 has been introduced, directed to a process for thickening a liquid or pourable product, having support in original claims 1 and 2 and throughout the Specification.

New Claim 17 has been introduced, directed to a process for thickening a liquid or pourable product, having support in original claims 1, 2 and 3, and throughout the Specification, and is directed to a process for thickening a liquid product by a set of recited steps, as well a the vegetables used in the Examples.

Care has been taken not to introduce any new matter.

The Rejected Claims 7, 10, 11 and All Claims are novel under 35 USC 102

Claims 7, 10, and 11 were rejected under 35 USC 102(b) as being anticipated by Allain, et al. (2,118, 391, hereinafter, Allain '391).

The present invention as set forth in independent Claim 7 is directed to a thickening agent. Allain '391 fails to disclose the inventive concept of the present invention, as it is directed to preventing discoloration of bananas. Allain '391 mix cooked and uncooked bananas with flour and sugar to form a dough, which is sheeted, dried, and formed into flakes the size of dry breakfast cereal. Allain '391 is deficient as an anticipatory reference because it fails to disclose expressly or inherently the following limitations of the independent claim 7 of a dried thickening agent having a particle size between 0.2 mm and 15 mm. Instead, Allain '391 discloses "crisp dry flakes" the size of dry breakfast cereals (col. 1, lines 31-34), which in any event are not the thickening agent as presently claimed. The dry flakes of Allain are made from a dry sheet prepared from a mixture of bananas with flour and sugar. Accordingly, the flakes do not even refer to the thickening agent being claimed in claim 7.

Furthermore, the banana mixture is not added to a liquid product to be thickened. On the contrary, flour is added to the banana mixture in order to thicken the banana mixture, so that the bananas may be formed into flakes by first rolling into sheets with heating (which will completely deactivate all PME, even that of the uncooked component).

Therefore, there can be no anticipation.

Claims 12-15 are believed to be novel and in condition for allowance, and No novelty rejections were raised as to these dependent claims. Additionally, the rejection of claim 11 has been obviated by introducing subject matter not rejected for anticipation. Specifically, Claim 11 has been amended to incorporate the subject matter of claims 12 and 14, i.e., to products in the form of an emulsion, containing salt.

The Rejected Claims 10-15 Are Not Obvious under 35 USC 103

Claims 10-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Allain '391 as applied to claims 7, 10, 11, and further in view of Belmar, et al., (WO 99/65328). Claim 11 has been amended to incorporate the subject matter of claims 12 and 14, i.e., to products in the form of an emulsion, containing salt.

Applicants respectfully traverse.

Claim 10 relates to a method for reducing the perceived acidity of a product by incorporating into that product 0.5 to 95% by weight based on the weight of the product of the thickening agent according to claim 7.

The deficiencies of Allain '391 are discussed above, i.e., Allain fails to disclose the dry particulate thickener as claimed in claim 7. Belmar , et al. fail to cure the deficiencies of Allain '391. Since the same thickener is not being used, and because Belmar et al. is completely silent regarding a combination of PME-deactived and PME-activated material, the combination of references does not result in the invention as set forth in claim 10, and the invention as a whole is not obvious.

Belmar et al. achieve thickening in a different way, i.e., a homogenization treatment, and no indication is given as to combining two vegetable fractions with and without PME. Belmar, et al. relates to one of the goals of the present invention: thickening liquid and pourable food products and avoiding or reducing the need for gums and starch. However, the approach in Belmar et al. is entirely different from the present invention. Indeed, vegetable products are also chosen, but thickening is not obtained by combining PME-deactivated and PME-active vegetable matter. Such combination of PME-deactivated and PME-active vegetable is neither disclosed nor suggested nor rendered predictable by Belmar et al. (the text and examples are silent on this). Belmar et al. rely

on different properties of certain vegetable matter, which properties are brought to life by subjecting certain vegetable matter to high pressure homogenization. The examples disclose compositions in which either all vegetable matter is PME-deactivated (by heating the final composition) or compositions in which all vegetable matter is PME-active. Consequently, the presently claimed subject matter cannot be obvious over Allain et al., and its deficiencies are not cured by Belmar, et al.

Applicants have shown unexpected results in thickening from a combination of PME-deactivated and PME-active vegetable matter, as compared with only deactivated or only active material. See Example 6 on pp. 17-18 of the Specification. See also all Examples and Figures. The examples show that there is no thickening from only PME-deactivated or only PME-activated material. Therefore, it would not have been predictable to use vegetables with different enzymes as a thickener for liquid products. Also, this data is objective evidence in support of patentability of the product-by-process claim 7.

In addition to claim 10 discussed above, dependent claims 11, 13 and 15 are allowable as dependent on allowable claim 7.

Claims 16 and 17 Are Independently Patentable

The present invention as set forth in claim 16 relates to a process for thickening a product by adding a mixture of PME-deactivated and non-PME deactivated vegetables or fruits to the products. The terminology used in claims 16 and 17 may be found in the Specification at page 3, lines 4-23. The present invention seeks to provide an alternative and improved fruit- or vegetable- based thickening agent and a cheap and/or easy process for thickening products which partially or completely replaces the need to use other thickeners such as starches or gums.

Independent claim 16 is directed to:

A process for thickening a liquid or pourable product comprising the steps of

i) preparing a first and a second portion of one or more PME-comprising fruits or vegetables;

ii) PME-deactivating the first portion;

iii) combining the first and the second portion in a weight ratio of about 2:8 to about 8:2 to form a fruit or vegetable mixture;

iv) incorporating the fruit or vegetable mixture in the product to be thickened,

wherein the fruits or vegetables are comminuted at one or more of steps i)-iii), and wherein the fruits are selected from bananas, apples, oranges, pineapples, edible berries, cherries or mixtures thereof and wherein the vegetables are selected from the group consisting of onions, carrots, celery, celeriac, and mixtures thereof.

Surprisingly, the addition of the claimed mixture to liquid or pourable products shows a strong thickening effect, whereas the addition of vegetables/fruits that are either PME-deactivated or non-PME-deactivated shows no or a much weaker thickening effect. (Note, tomatoes and peppers are referred to in the Specification at page 6 as fruits, and are not suitable according to the invention. In any event, tomatoes and peppers are not

among the selected fruits/vegetables specifically recited in claims 16 and 17.) The thickening effect of PME-deactivated/non-PME deactivated vegetable or fruit mixtures can be obtained without using costly pressure or high-pressure homogenization treatment. See Specification at p. 2.

Allain '391 does not disclose, suggest, or in any way render predictable the addition of a mixture of PME-deactivated and PME-active bananas to a liquid or pourable product for thickening. Therefore, the process for thickening a liquid or pourable product as claimed is novel and inventive.

Belmar, et al. fail to remedy the deficiencies of Allain '391. Belmar, et al. relates to one of the goals of the present invention: thickening liquid and pourable food products and avoiding or reducing the need for gums and starch. However, the approach in Belmar et al. is entirely different from the present invention. Indeed, vegetable products are also chosen, but thickening is not obtained by combining PME-deactivated and PME-active vegetable matter. Such combination of PME-deactivated and PME-active vegetable is neither disclosed nor suggested nor rendered predictable by Belmar et al. (the text and examples are silent on this). Belmar et al. rely on different properties of certain vegetable matter, which properties are brought to life by subjecting certain vegetable matter to high pressure homogenization. The examples disclose compositions in which either all vegetable matter is PME-deactivated (by heating the final composition) or compositions in which all vegetable matter is PME-active. Consequently, the presently claimed subject matter cannot be obvious over Allain et al., and its deficiencies are not cured by Belmar, et al.

Independent claim 17 is directed to a process for thickening a product consisting essentially of the recited steps, including drying, and is also independently patentable.

CONCLUSION

It is respectfully requested that the application be allowed to issue.

If a telephone conversation would be of assistance, Applicant's undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,

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